



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/220,184	12/22/1998	ROBERT B. DYBDAL	D-350	3826
7590	02/02/2004		EXAMINER	
DERRICK M REID			LEE, BENNY T	
THE AEROSPACE CORPORATION				
P O BOX 92957 M1 040				
LAS ANGELES, CA 900092957			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

09/220184

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER NUMBER
15	

DATE MAILED:

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

This application has been examined  Responsive to communication filed on 25 Sept 2002  This action is made final.

A shortened statutory period for response to this action is set to expire Two (2) month(s), 30 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1.  Notice of References Cited by Examiner, PTO-892.  
2.  Notice re Patent Drawing, PTO-848.  
3.  Notice of Art Cited by Applicant, PTO-1449  
4.  Notice of Informal Patent Application, Form PTO-152  
5.  Information on How to Effect Drawing Changes, PTO-1474  
6.

Part II SUMMARY OF ACTION

1.  Claims 9 - 18 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2.  Claims \_\_\_\_\_ have been cancelled.

3.  Claims 9 - 14, 15 - 18 are allowed.

4.  Claims \_\_\_\_\_ are rejected.

5.  Claims \_\_\_\_\_ are objected to.

6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.

7.  This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.

8.  Allowable subject matter having been indicated, formal drawings are required in response to this Office action.

9.  The corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are  acceptable;  not acceptable (see explanation).

10.  The  proposed drawing correction and/or the  proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been  approved by the examiner,  disapproved by the examiner (see explanation).

11.  The proposed drawing correction, filed \_\_\_\_\_, has been  approved,  disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections **MUST** be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.

12.  Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has  been received  not been received

been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14.  Other

Art Unit: 2817

The substitute specification filed 25 September 2002 has been reviewed, found acceptable and has replaced the original specification.

This application is in condition for allowance except for the following formal matters:

**In the Specification:**

The following informalities pertain the substitute specification filed 25 September 2002:

Page 13, lines 22, 23, note that "20" should correctly be --14-- at each instance. Page 14, line 7, note that --respective-- should precede "signals" and "24 and 18" should be rephrased as --18 and 24-- for clarity. Page 15, line 13, note that "12" (first occurrence) should correctly be --18--; line 14, note that "12" should correctly be --10--; line 23, note that - respectively-- should precede "separate"; line 27, note that "22" should correctly be --16--. Page 16, line 11, note that "waveguide" should be deleted and --of waveguides-- should follow "sections for clarity; line 18, note that --respective-- should precede "ports" and "22 and 16" should be rephrased as --16 and 22 for clarity. Page 17, line 5, note that "19 or 25" should be rephrased as --25 or 19-- for clarity; line 19, note that "24" should correctly be --25-- and "19" should correctly be --24--. Page 19, line 20, note that "18" should be deleted; line 21, note that --18-- should follow "signals" for clarity. Page 20, line 2, note that after "53" and prior to "As such", the following sentence should be inserted: -- The feed 13 communicates signal 12 through part 10, straight waveguide section 14 and port 16 but not selective reflective surface 44 of bent waveguide section 40 not being selected.--. Page 22, line 22, note that "25ab" should correctly be --25a and 25b--. Page 23, line 8, note that "53ab" should correctly be --53a and 53b--; line 20, note that "36a" should correctly

Art Unit: 2817

be --46a--. Page 24, line 17, note that "50b" should correctly be --50a--; line 22, note that "52" should correctly be --52b--. Page 24, line 27, and page 25, line 8, note that "50b" should correctly be --51b-- at each occurrence. Note that reference labels (42a, 42b) still need explicit description relative to Figure 4.

**In the Claims:**

In claim 11, fourth line, note that "smaller" should correctly be --larger--.

In claims 12, fourth line and claims 15, 18, line 26 of each claim, note that "respecting" should be rephrased as --with respect to-- at each occurrence for clarity of description.

In claims 15, 18, line 6 of each claim, note that --respective-- should precede "signals" at each occurrence for clarity of description.

In claims 16, 17, note that the recitations of "the first waveguide shape is straight and "the second waveguide shape is bent at ninety degrees having a forty-five degree reflective surface" are deemed redundant since they have previously been recited in claim 15 from which these claims directly depend. Accordingly, these recitations should be deleted from these claims.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

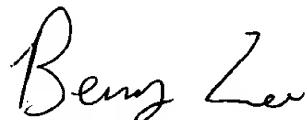
Claims 9-18 are allowable over the prior art of record.

Application/Control Number: 09/220,184

Page 4

Art Unit: 2817

Any inquiry concerning this communication should be directed to Benny Lee at telephone number (571) 272 1764.



BENNY T. LEE  
PRIMARY EXAMINER  
ART UNIT 2817

B LEE/ac

01/14/04